ANACONDA ALUMINUM COMPANY

INTER-OFFICE CORRESPONDENCE

DATE July 6, 1970

TO F. G. Doenges

COPIES: W. H. Benton, Jr.
D. W. Everett
F. Laird
W. Unger ✓

LOCATION

FROM R. E. Bauer

SUBJECT Emission Control
Melting Furnaces
Rod Mill - Columbia Falls
Progress Report #2

To date, W. Unger of Anaconda's Environmental Control Department in Butte, Montana and the writer have researched technical articles, investigated competition's installations and contacted many of the name suppliers of pollution control equipment concerning the subject problem.

Specifically W. Unger has had phone conversations with Dr. William Eastman and Keith Bolster of Kaiser Aluminum and Frank Cavannaugh of Revere Copper and Brass. All contacted parties had some experience at trying to control chlorine emissions from alumina melting furnaces and unanimously cautioned that we proceed with a healthy respect for the problem. They also indicated that further work was necessary to develop a collection system perfectly satisfactory in all respects but felt that they would rule out precipitators, wet and dry, and baghouses due to the corrosion aspects and elevated temperatures of the effluent.

The writer has had lengthy conversations and/or proposals from Airetron Engineering Division of Pulverizing Machinery Company, Ceilcote Co., Willard Smith, Inc., Chemical Construction Co., Westinghouse Electric, Research Cottrell, Wheelabrator Corp., Ducon and Universal Oil Products Corp. The net result of these contacts was that only one company has actual installations in the field to handle this emission. This is the U.O.P. company which has several installations, one which F. G. Doenges observed in operation at Reynolds Longview Plant. (See F. G. Doenges' report dated 4-1-70.) All other companies suggested scrubber installations and are either forwarding proposals or have offered to work with us in developing a system (for a fee).

It is my understanding that the Wire and Cable Co. is investigating substitute methods for cleaning and degassing their aluminum. At F. G. Doenges' request, I recently hurriedly compiled a "ball park guesstimate" on the capital and operating cost for a typical scrubber system. This was to be used as a guide in cost comparisons between emission control systems and substitute metal cleaning systems. A copy of this document is attached.

Re: Emission Control - Rod Mill, Columbia Falls

At this point, we (Walt Unger and the writer) make the following recommendations:

1. Rule on the merits of pursuing this study versus a substitute method which eliminates chlorine.

2. If it is decided that chlorine must continue to be used, meet with U.O.P. to develop a firm equipment proposal and economic study. This should entail as much testing as is considered necessary to prove that the proposed installation will meet specifications and perform with minimum maintenance.

3. Evaluate methods that might be used to dispose of the scrubber effluent and determine the cost.

Unless we hear to the contrary, we will advise Anaconda Wire & Cable Company of our decision and proposed method of handling effluent if chlorine continues to be used.

R. E. Bauer

kw

attachment